

Additional file 2 Alkaloids, coumarins, limonoids, carotenoids and phenolic acids isolated from *Citrus* species.

Compounds	source	ref.
<i>alkaloids</i>		
(±)octopamine	CAT ^e ; CAT ^a ; CR ^a	[1, 2, 3, 4]
(±)synephrine	CAT ^e ; CAT ^a ; CAT ^d ; CR ^a ; CU ^a ; CSI ^e ; CSI ^d	[1, 2, 3, 4, 5]
tyramine	CAT ^e ; CR ^a	[2, 3]
N-methyltyramine	CAT ^e ; CR ^a	[2, 3]
hordenine	CAT ^e	[2]
γ-aminobutyric acid	CMY ^d ; CP ^d ; CAT ^d	[6]
2-hydroxyethyltrimethyl-lammonium	CMY ^d ; CP ^d ; CAT ^d	[6]
N-methylnicotinic acid	CMY ^d ; CP ^d ; CAT ^d	[6]
L-proline	CMY ^d ; CP ^d ; CAT ^d	[6]
N-methyl-L-proline	CMY ^d ; CP ^d ; CAT ^d	[6]
N,N-dimethyl-L-proline	CMY ^d ; CP ^d ; CAT ^d	[6]
4-hydroxy-L-proline	CMY ^d ; CP ^d ; CAT ^d	[6]
4-hydroxy-L-prolinebetaine	CMY ^d ; CP ^d ; CAT ^d	[6]
tryptophan	CB ^a ; CB ^b ; CB ^f	[7]
tryptamine	CB ^f	[7]
N-methyltryptamine	CB ^b	[7]
N,N-dimethyltryptamine	CB ^a ; CB ^b	[7]
N,N,N-triethyltryptamine	CB ^a ; CB ^b ; CB ^f	[7]
5-hydroxytryptamine	CB ^f	[8]
5-hydroxy-N-methyltryptamine	CB ^b ; CB ^f	[8]
5-hydroxy-N,N-dimethyltryptamine	CB ^a ; CB ^b ; CB ^f	[8]
5-hydroxy-N,N,N-trimethyltryptamine	CB ^a ; CB ^b ; CB ^f	[8]
<i>coumarins</i>		
pranferin	CP ^a ; CP ^c	[9]
meranzin	CP ^a ; CP ^c ; CAT ^c	[9, 10, 11]
isomeranzin	CP ^c ; CG ^e ; CAT ^c ; CAT ^a	[10, 11, 12]
meranzin hydrate	CAT ^e ; CAT ^a ; CP ^c	[11, 12, 13]
auraptene	CP ^a ; CP ^c ; CP ^e ; CAT ^e ; CMA ^a ; CAF ^e ; CB ^e ; CSI ^e ; CR ^e ; CLI ^e ; CLI ^a ; CLM ^a ; CHA ^a ; CCA ^a	[9, 13, 14, 15, 16]
ecxyaurapten	CP ^a ; CMA ^a	[15]
osthol	CP ^a ; CP ^c ; CMA ^a ; CG ^e	[9, 11, 15, 17]
marmin	CP ^a ; CP ^c ; CAT ^e	[9, 13]
limettin	CSI ^a ; CLI ^a ; CLI ^c ; CP ^a ; CP ^d ; CB ^a ; CB ^c ; CMA ^a ; CCL ^a ; CAF ^a ; CAF ^c ; CAF ^d ; CAF ^e	[10, 15, 18]
5-geranyloxy-7-methoxycoumarin	CLI ^a ; CLI ^c ; CP ^a ; CAF ^c ; CAF ^e ; CB ^c	[10, 11, 15, 18]
5-isoantenyloxy-7-methoxy-coumarin	CLI ^c	[11]
ecxybergamottin hydrate	CP ^c	[11]
8-geranyloxypсорален	CLI ^a ; CLI ^c ; CAF ^c	[10, 15]
umbelliferone	CP ^e ; CAF ^e ; CB ^e ; CAT ^e ; CSI ^e ; CR ^e ; CLI ^e	[16]
herniarin	CAF ^c	1
		[10]

oxyaucedanin	CCL ^a ; CLI ^a ; CLI ^c ; CAF ^c	[10, 11, 15]
oxyaucedanin hydrate	CLI ^a ; CLI ^c ; CAF ^c	[10, 15]
psoralen	CB ^a	[15]
isopimpinellin	CCL ^a ; CLI ^c ; CAF ^c ; CAF ^d ; CAF ^a ; CAF ^e	[10, 11, 15, 18, 19]
byakangelicin	CCL ^a	[10]
byakangelicol	CCL ^a ; CLI ^c ; CAF ^c	[10, 15]
imaratorin	CLI ^c ; CAF ^c	[10]
iscmaratorin	CLI ^c ; CAF ^c	[10]
cnidilin	CLI ^c ; CAF ^c	[10]
cnidicin	CLI ^c ; CAF ^c	[10]
bergapten	CP ^a ; CP ^c ; CCL ^a ; CB ^a ; CB ^c ; CMA ^a ; CAF ^c ; CAT ^c ; CG ^e	[9, 10, 15, 20]
5-hydroxyfurocoumarin	CG ^e	[20]
bergamottin	CLI ^a ; CLI ^c ; CP ^a ; CP ^d ; CB ^a ; CMA ^a ; CAF ^c ; CAF ^d ; CAF ^a	[10, 11, 15, 19]
ecxybergamottin	CP ^a ; CP ^c ; CMA ^a ; CAT ^c ; CAT ^d	[10, 15, 21]
6',7'-dihydroxybergamottin	CP ^a ; CP ^c ; CMA ^a ; CCA ^a ; CK ^a ; CTB ^a ; CLE ^a	[9, 14, 15]
limonoids		
limonin	CG ^e ; CR ^f ; CR ^e ; CMA ^e ; CAT ^e ; CAT ^f ; CAF ^d ; CJ ^f	[3, 22, 23, 24, 25, 26, 27]
nomilin	CG ^e ; CR ^f ; CR ^e ; CMA ^e ; CAT ^e ; CJ ^f ; CAT ^f	[3, 23, 24, 25, 26, 27]
obacunone	CR ^f ; CJ ^f ; CAT ^f	[25, 26, 27]
obacunone acetate	CAT ^f	[27]
deacetyl-nomilin	CAT ^e ; CAT ^f	[24, 27]
citriolide-A	CR ^f	[26]
deoxylimonin	CAT ^f	[27]
methyldeacetylnomilinate	CAT ^f	[27]
ichangin	CAT ^e ; CAT ^f	[24, 27]
ichangensin	CAT ^f	[27]
limonexic acid	CAF ^d ; CLI ^f	[22,25]
isolimonexic acid	CAT ^e ; CAF ^d ; CLI ^f	[22, 24, 25]
calamin	CAT ^f	[27]
limonin glucoside	CMA ^e ; CR ^e ; CAT ^e ; CAF ^d ; CLI ^f ; CSI ^e	[22, 23, 24, 25, 28]
nomilin glucoside	CSI ^e	[28]
obacunone glucoside	CMA ^e ; CR ^e ; CR ^f ; CAT ^e ; CAT ^f ; CLI ^f ; CSI ^e	[23, 24, 25, 27, 28]
deacetyl nomilin glucoside	CMA ^e ; CR ^e ; CAT ^e ; CLI ^f ; CSI ^e	[23, 24, 25, 28]
nomilinic acid glucoside	CMA ^e ; CR ^e ; CAT ^e ; CLI ^f ; CSI ^e	[23, 24, 25, 28]
deacetyl nomilinic acid	CSI ^e	[28]
isoobacunc acid glucoside	CAT ^e	[24]
obacunc acid glucoside	CAT ^f	[27]
calamin glucoside	CAT ^f	[27]
carotenoids		
violaxanthin	CCL ^a ; CCL ^b ; CU ^a ; CSI ^a	[29, 30, 31, 32]
β-cryptoxanthin	CCL ^a ; CCL ^b ; CU ^a ; CSI ^a	[29, 30, 31, 32]

carotene	CCL ^a ; CCL ^b ; CU ^a ; CSI ^a	[29, 31, 32]
lutein	CCL ^b ; CSI ^a	[31, 32]
zeaxanthin	CCL ^b ; CSI ^a	[31, 32]
antheraxanthin	CCL ^b ; CSI ^a	[30, 31]
cryptoxanthin	CCL ^b ; CSI ^a	[31, 32]
phytoene	CCL ^b ; CSI ^a	[30, 31, 32]
phytofluene	CCL ^b ; CSI ^a	[30, 31, 32]
β-citraurin/accarotenol	CSI ^a	[30, 32]
ζ-Carotene	CCL ^b	[31]
neoxanthin	CSI ^a	[32]
Phenolic acid		
sinapic acid	CU ^a ; CMI ^a ; CP ^a ; CP ^b ; CSI ^e	[33, 34, 35, 36]
P-coumaric acid	CAT ^d ; CR ^a ; CSI ^a ; CU ^a ; CMI ^a ; CP ^a ; CP ^b ; CSI ^e ; CAT ^a ; CAT ^d	[33, 34, 35, 36, 37, 38, 39, 40]
ferulic acid	CR ^d ; CR ^a ; CU ^a ; CMI ^a ; CP ^a ; CP ^b ; CSI ^e ; CAT ^a ; CAT ^d	[33, 34, 35, 36, 37, 39, 40]
caffeic acid	CR ^d ; CSI ^a ; CU ^a ; CMI ^a ; CP ^a ; CP ^b	[33, 34, 36, 37, 38]
trans-2-hydroxicinnamic acid	CR ^d ; CAT ^d ; CAT ^a	[37, 40]
trans-cinnamic acid	CAT ^d ; CAT ^a	[41]
rosmarinic acid	CR ^d ; CAT ^d ; CAT ^a	[37, 41]
protocatechuic acid	CU ^a ; CP ^a ; CP ^b	[34, 36]
P-hydroxybenzoic acid	CR ^a ; CU ^a ; CP ^a ; CP ^b	[34, 36, 39]
vanillic acid	CR ^d ; CR ^a ; CAT ^a ; CAT ^d ; CU ^a ; CP ^a ; CP ^b	[37, 34, 36, 39, 41]
gallic acid	CR ^d ; CR ^a ; CAT ^a ; CAT ^d	[37, 39, 41]
chlorogenic acid	CR ^d ; CP ^a ; CP ^b ; CAT ^a ; CAT ^d	[37, 36]
ferulic-O-hexoside	CSI ^b ; CR ^b ; CU ^b ; CLI ^b ; CP ^b	[42]
sinapic-O-hexoside	CSI ^b ; CR ^b ; CU ^b ; CLI ^b	[42]
syringic acid	CR ^d ; CAT ^a ; CAT ^d	[37, 41]

^a: peel; ^b: pulp; ^c: pressed oil; ^d: juice; ^e: whole fruit; ^f: seed; CAF: *C. aurantifolia*; CAT: *C. aurantium*; CB: *C. bergamia*; CCA: *C. canaliculata*; CCL: *C. clementina*; CG: *C. grandis*; CHA: *C. hassaku*; CJ: *C. junos*; CK: *C. kinokuni*; CLE: *C. leiocarpa*; CLI: *C. limon*; CLM: *C. limonimedica*; CMA: *C. maxima*; CMI: *C. microcarpa*; CMY: *C. myrtifolia*; CP: *C. paradisi* peel; CR: *C. reticulata*; CSI: *C. sinensis*; CTB: *C. tachibana*; CU: *C. unshiu*.

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